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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/681,855	06/19/2001	Ding Jong Wang	PMXP0107USA	7087

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NAIPO (NORTH AMERICA INTERNATIONAL PATENT OFFICE)
P.O. BOX 506
MERRIFIELD, VA 22116

EXAMINER

NGUYEN, KIMNHUNG T

ART UNIT	PAPER NUMBER
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2674

DATE MAILED: 10/03/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/681,855

Applicant(s)

WANG ET AL.

Examiner

Kimnhung Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-30 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 5.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: .

DETAILED ACTION

This application has been examined. The claims 1-30 are pending. The examination results are as following.

Drawings

1. New corrected drawings are required in this application because the drawings are very small; Examiner cannot see the elements of the drawings. Applicant is advised to employ the services of a competent patent draftsman outside the Office, as the U.S. Patent and Trademark Office no longer prepares new drawings. The corrected drawings are required in reply to the Office action to avoid abandonment of the application. The requirement for corrected drawings will not be held in abeyance.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 3, 5, 8-10, 23, 26, 28 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Faltermeier et al. (US patent 5,712,725) in view of Lo (US patent 5,699,083).

Regarding claims 1, 9, 23 and 28, Faltermeier et al. disclose in figure 1A a pointing device electrically connected to a computer for controlling movements of a cursor on a display device of the computer (see abstract), the pointing device comprising a housing; a pointing unit (mouse) installed inside the housing for generating pointing signals to

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control movements of the cursor (see column 3, lines 16-25); a rollable device (3) for generating rolling signals (see column 4, lines 49-53); and a control unit for controlling the pointing device (see abstract); and wherein when the computer transmits a state signal to the pointing device, the control unit controls an illumination mode of the rollable device according to the state signal (see shutter 16 functions to interrupt the incident illumination 18 can switched on even during in transilluminated light and defines the source of incident illumination, see column 4, lines 59-65). However, Faltermeier et al. do not disclose a light source for illuminating the rollable device. Lo discloses a cursor control device having a wheel (17) and light source (29) and the wheel may synchronously rotate with the ball a light source (29) and a sensor are respectively disposed on the both sides of the wheel (see abstract, see column 2, lines 39-40). It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the using of light source disposed on the both sides of the wheel as taught by Lo into the pointing device of Faltermeier et al. because this would for receiving the light source and the sensor through the hole and for allowing entrance of light passing via the wheel (see column 2, lines 43-52).

Regarding claims 3, 5 and 26 are dependent upon claims 1 and 23, and are rejected on the same reasons claims 1 and 23, furthermore, Faltermeier et al. disclose in figure 1C wherein the rollable is a rolling wheel (3), however, Faltermeier et al. do not disclose and the roller comprises a reflecting surface for reflecting the light. Lo discloses an inherent a reflecting surface for reflecting the light because the roller provided by the light source that Lo discloses above.

Regarding claim 8, is dependent upon claim 1, and is rejected on the same reasons claim 1; furthermore, Faltermeier et al. disclose wherein the rollable device is a trackball (see figure 1A, see mouse ball roller 2, see column 6, lines 65-67 and column 7, line 1)

Regarding claim 12, Faltermeier et al. disclose wherein the computer comprises a driver for detecting a state of the computer and transmitting a corresponding state signal to the pointing device (see control unit for controlling movements in optical, see abstract, see column 3, lines 16-26).

Regarding claims 10 and 30, are dependent upon claims 1, and 23 and are rejected on the same reasons claims 1, and 23, furthermore, Fatermeier et al. do not disclose the light source comprises at least one light-emitting diode. Lo discloses the light source (29) such as LED (see column 2, lines 39-40). It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the using of light source is a LED disposed on the both sides of the wheel as taught by Lo into the pointing device of Faltermeier et al. because this would for receiving the light source and the sensor through the hole and for allowing entrance of light passing via the wheel (see column 2, lines 43-52).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

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having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 2, 4, 6, 7, 18-20, 24-25 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Faltermeier et al. (5,712,725) and Lo (US patent 5,699,083) as applied to claims 1 and 23 in view of Merminod et al. (US patent 6,157,369).

Faltermeier et al. disclose in figure 1A a pointing device electrically connected to a computer for controlling movements of a cursor on a display device of the computer (see abstract), the pointing device comprising a housing; a pointing unit (mouse) installed inside the housing for generating pointing signals to control movements of the cursor (see column 3, lines 16-25); a rollable device (3) for generating rolling signals. Lo discloses a light source through the wheel as disclosed above. Furthermore, Faltermeier et al. disclose an electrical conduction (see column 3, lines 64-67), However, Faltermeier et al. and Lo do not disclose wherein the rollable device comprises a transparent material; the rolling wheel and the ring being made of a transparent material to allow the light passing through the ring; the pointing device comprises a support and electrical conduction device; the light source comprising at least one light-emitting diode; and wherein pointing device comprises a at least one button; wherein pressing of the button in a predetermined and causes the control unit to transmit a feedback signal to the computer; and when the rollable device is pressed downwards the button becomes activated.

Regarding claims 4 and 25, Merminod et al. disclose in figure 3 wherein the rolling wheel comprises a roller (12) and a ring (40), and the ring surrounding an outer circumference of the roller (see figure 3).

Regarding claims 7 and 29, Merminod et al. disclose in figures 2-3 the pointing device comprises a support (28) (see figures 2-3, column 3, lines 18-20).

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Regarding claim 18-20, Merminod et al. disclose a roller device comprising at least one button (see press down of microswitch (34, see column 3, lines 39-40), and device is illuminated cause the control unit to transmit a feedback signal to the computer, or rollable device is pressed downwards, the button becomes activated (see column 4, lines 6-13).

From the claims 6-7, 9-10 and 18-20, and 24, it would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the using of rolling wheel comprising a ring, a support, with a button activated to transmit a feedback signal to the computer as taught by Merminod et al. into the pointing device having roller of Faltermeier et al. and Lo's system because this would support the roller, and give the user a noticeable feedback feel at the point where the switch has been activated, and improve the friction of the user's finger when rotating the roller (see Merminod et al., column 4, lines 6-13, and lines 57-60).

From the claims 2, 4 and 25, it would have been obvious for Faltermeier et al., Lo and Merminod et al.'s system to have the ring being made of a transparent material as claimed since such a modification would have involved a mere change in the material of a system. A change in material is generally recognized as being within the level of ordinary skill in the art.

6. Claims 11, 13-15, 21 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Faltermeier et al. (US patent 5,712,725) and Lo (US patent 5,699,083) and in view of Fisher (US patent 5,903,267).

Faltermeier et al. and Lo disclose a pointing device electrically connected to a computer for controlling movements of a cursor on a display device of the computer (see abstract), the pointing device comprising a housing; a pointing unit (mouse) installed inside the housing for

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generating pointing signals to control movements of the cursor (see column 3, lines 16-25); a rollable device (3) for generating rolling signals as disclosed above. However, Faltermeier et al. and Lo do not disclose wherein the rollable device is adapted to control scrolling of a window shown on the display or a scrolling navigation function, and a user interface program for corresponding state signal to the pointing device. Fisher discloses a method and apparatus for controlling the scroll rate of a scroll bar slider (304) in a graphical user interface (300) of a window (see abstract, see figure 3, see column 5, lines 28-42). It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement for controlling the scroll rate of a scroll bar slider (304) in a graphical user interface (300) of a window as taught by Fisher into the rollable device of Faltermeier et al. because this would be displayed in a viewing window with the slider moving the document from one of the current domain to the other end (see abstract).

7. Claims 16-17 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Faltermeier et al. (US patent 5,712,725) and Lo (US patent 5,699,083) and Merminod et al. (US patent 6,157,369) and in view of Gentner et al. (US patent 6,271,838).

Faltermeier et al. disclose a pointing device electrically connected to a computer for controlling movements of a cursor on a display device of the computer (see abstract), the pointing device comprising a housing; a pointing unit (mouse) installed inside the housing for generating pointing signals to control movements of the cursor (see column 3, lines 16-25); a rollable device (3) for generating rolling signals. Lo discloses the light source through the roller as disclosed above. Merminod et al. disclose a support. However, Faltermeier et al., Lo and Merminod et al.

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do not disclose the computer has received new e-mail and then transmit to a pointing device. Gentner et al. disclose in figures 2 and 5 a graphical user interface having the mail view application as display of the window. It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the mail view application as display in the window as taught by Gentner et al. into the computer system of Faltermeier et al., Lo and Merminod et al.'s system because this would provide users with incoming e-mail, calendaring, name directory access, and internet browsing capabilities all written in Java programming language (see Gentner et al., see column 1, lines 31-37).

Correspondence

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kimnhung Nguyen whose telephone number (703) 308-0425.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **RICHARD A HJERPE** can be reached on **(703) 305-4709**.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D. C. 20231

Or faxed to:

(703) 872-9314 (for Technology Center 2600 only).

Hand-delivery response should be brought to: Crystal Park II, 2121 Crystal Drive, Arlington, VA Sixth Floor (Receptionist).

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

Kimnhung Nguyen
September 29, 2003



RICHARD HJERPE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600